

Owens, Mike

From: David Beatty <dbeatty@utah.gov>
Sent: Monday, October 19, 2015 6:33 AM
To: Owens, Mike
Subject: Hunter
Attachments: 2015-10-15 Htr Minimization Plan.pdf

Pacificorp submittend a new minimization plan on Oct. 10, it is attached. Their copy of the other one is missing the items on page 3, but you can see what they were on this new one.

Also, do you happen to have the original Title V application for Hunter? It looks like our copy went missing 15 years ago and never got electronically scanned with the others.



Hunter Plant

2 Miles South of Castle Dale on Highway 10
P.O. Box 569
Castle Dale, UT 84513

October 10, 2015

Mr. Bryce Bird, Director
Utah Department of Environmental Quality
Division of Air Quality
150 North 1950 West
P.O. Box 144820
Salt Lake City, UT 84114-4820

RE: Hunter Plant Emissions Minimization Plan – Title V Operating Permit 1500101001

Dear Mr. Bryce Bird:

In accordance with the Hunter Power Plant Title V Operating Permit (Permit # 1500101001) condition II.B.1.h(g), please find enclosed a revised copy of the Hunter Plant Emissions Minimization Plan. This revision is due to equipment changes, specifically the replacement of Unit 1's precipitator with a baghouse.

I hereby certify that the information submitted therein is true, accurate and complete, based on information and belief formed after reasonable inquiry.

Should you have any questions regarding this revised Emissions Minimization Plan, please contact Terry Guthrie, Hunter Plant Senior Engineer at (435) 748-6059.

Sincerely,

Laren Huntsman
Plant Manager – Managing Director Hunter Power Plant
Responsible Official

TAG:tag

cc: Steve Jensen – 310 NTO
Tyson Ekker - Hunter Power Plant
File

Hunter Plant Emissions Minimization Plan (Startup and Shutdown Minimization Plan)

1. General Emissions Description

The intent of this Hunter Plant Startup and Shutdown Minimization Plan ("Minimization Plan") is to minimize the duration and extent of emissions during periods of startup and shutdown.

2. Startup General Description

Fuel oil is the initial heat input source used during boiler unit startup, and the unit startup begins when fuel oil is introduced into the boiler. As the boiler, turbine equipment and steam temperatures rise to design values, coal feeders are gradually placed into service concurrently with fuel oil firing. As steam and equipment temperatures continue to rise while co-firing on fuel oil and coal, the boiler combustion process stabilizes adequately such that fuel oil firing can cease.

Startup ends no later than the point in time when flue gas temperatures at each outlet duct of the fabric filter baghouse (All Units) reach a temperature of 220°F and two coal feeders have been placed into service, or 20 hour duration (300 hours per year per boiler and 750 hours per year combined for all 3 boilers).

Although the equipment is not fully effective until proper temperatures and stable conditions are reached, startup emissions are minimized by placing the baghouse and flue gas desulfurization (FGD) scrubber in service prior to the introduction of fuel into the boiler.

3. Startup Definition – Units 1 through 3

For Hunter Units 1 through 3, startup begins with the introduction of fuel to the boiler.

Startup ends no later than the point in time when two coal feeders have been placed in service and the flue gas temperature at each of the outlet ducts of the baghouse reach a temperature of 220°F, or 20 hours duration, whichever occurs first. (Startup duration is limited to 300 hours per year per boiler and 750 hours per year combined for all 3 boilers).

4. Shutdown General Description

Unit shutdown begins when the unit load or output is reduced with the intent of removing the unit from service. Shutdown ends at the point when fuel input to the boiler ceases.

Shutdown events will generally be of short duration. During planned unit shutdown events, generator electrical power output will be gradually reduced as steam generation and thermal input to the boiler, via coal combustion, are reduced. Eventually the generator will be disconnected from the electrical power grid and fuel input to the boiler will cease. The FGD scrubbers and baghouse will remain in service until all fuel sources are removed from the boiler.

5. Shutdown Definition – Units 1 through 3

Shutdown is defined as the period beginning when the unit load is reduced with the intent of removing the unit from service, or when the unit trips as the result of a sudden and unforeseen failure or malfunction and ending when fuel flow to the boiler ceases.

6. Startup Emission Minimization

The Hunter Plant utilizes work practices to minimize emissions during startup events. These work practices include ensuring that appropriate pollution control equipment (FGD scrubbers and baghouses) are operational prior to the introduction of fuel oil or coal to the boiler during a startup event.

7. Reporting and Recordkeeping

Startup and shutdown emissions will be controlled by minimizing the frequency and duration of plant startup and shutdown events. Records will be maintained that document the number and duration of individual startup and shutdown events.

Hunter plant environmental personnel will record each boiler unit startup event and log the following information:

- a. The boiler unit undergoing startup
- b. The date, time and duration of each startup episode including:
- c. The start time of the startup event (initiation of boiler fuel oil firing)
- d. The end time of the startup event, which is no later than the point in time when two coal feeders have been placed into service and the flue gas temperature at each of the outlet ducts of the baghouse reaches a temperature of 220°F, or 20 hour duration.
- e. Record startup and shutdown NO_x, SO₂, CO₂ and CO emissions, Units 1, 2 and 3.

Hunter plant environmental personnel will record each boiler unit shutdown event and log the following information:

- a. The boiler unit undergoing shutdown
- b. The date, time and duration of each shutdown episode including:

- c. The start time of the shutdown event
- d. The end time of the shutdown event.
- e. Record startup and shutdown NO_x, SO₂, CO₂ and CO emissions, Units 1, 2 and 3.

8. Summary

In Section 1 – 5, PacifiCorp has defined boiler startup and shutdown at the Hunter Plant. PacifiCorp has also identified work practices (Work Practice Plan S-1906) that Hunter Plant personnel utilize to minimize emissions during boiler startup and shutdown events. These work practices include ensuring that appropriate pollution control equipment (FGD scrubbers and baghouses) are operational prior to the introduction of fuel oil or coal to the boiler during a startup event.

Records will be maintained as indicated in Section 7 to document the date, time and duration of each boiler startup and shutdown event, emissions during startup and shutdown, as well as the total annual duration of boiler startup events, on a unit-specific basis.